

## CLAIMS

What is claimed is:

1. A method for transporting data across a plurality of data channels comprising:  
5 concurrently generating a plurality of lesser width parallel data words containing parallel data from a greater width parallel data word such that all adjacent bits of said greater width parallel data word are contained in different ones of said lesser width parallel data words, wherein the number of bits in said greater width parallel data word is greater than the number of bits in each of said lesser width parallel data words;  
10 serializing parallel data representative of said plurality of lesser width parallel data words; and  
transmitting said serialized data words over a corresponding plurality of distinct serial data channels.
- 15 2. A method for transporting data across a plurality of data channels comprising:  
concurrently generating a plurality of lesser width width parallel data words containing parallel data from a greater width parallel data word such that all adjacent bits of said greater width parallel data word are contained in different ones of said lesser width parallel data words, wherein the number of bits in said greater width parallel data word is  
20 greater than the number of bits in each of said lesser width parallel data words;  
scrambling the parallel data in said lesser width parallel data words to form a plurality of scrambled data words;  
serializing said scrambled data words; and  
transmitting said serialized scrambled data words over a corresponding plurality of distinct  
25 serial data channels.